



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/689,824 | 10/13/2000 | Takaaki Sasaki | PNET.011D | 7074 |

7590 08/14/2002
JONES VOLENTINE, LLC
SUITE 150
12200 SUNRISE VALLEY DRIVE
RESTON, VA 20191

EXAMINER

BERRY, RENEE R

ART UNIT PAPER NUMBER

2818

DATE MAILED: 08/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/689,824

Applicant(s)
Sasaki

Examiner
Renee Berry

Art Unit
2818



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 21, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-15 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-15 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

Art Unit: 2818

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. Claims 7-15 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent no. 5,866,942 to Suzuki et al.

Suzuki teaches a method of making a semiconductor package comprising preparing a semiconductor package structure by providing a substrate for mounting a semiconductor element thereon to fix a semiconductor element to one side thereof and a connecting pattern provide on the other side of the substrate and by forming a through hole from the one side to the other side of the substrate; fixing a surface where the element is formed of a semiconductor element on the one side of the substrate of the semiconductor package such that an electrode of the semiconductor element is within the through hole; electrically connecting a connecting pattern and an electrode of a semiconductor element via wires through the through hole; and sealing the through hole and wires with resin at column 12, lines 56-67, claim 1.

Art Unit: 2818

In regard to claim 8, Suzuki teaches a connecting pattern is provided continuously in a plurality of stages and an end portion of connecting pattern on the side of the through hole is provided on a stage on the side of the one side of the substrate at column 13, lines 28-46, claim 8.

In regard to claim 9, Suzuki teaches the through hole is a plurality of through holes at column 12, lines 56-67.

In regard to claim 10, Suzuki teaches the surface where the element is formed of a semiconductor element is fixed on the one side of the substrate of the semiconductor package via a tape-like bonding material at column 14, lines 35-37, claim 14.

In regard to claim 11, Suzuki teaches the surface where the element is formed of a semiconductor element is fixed on the one side of the substrate of the semiconductor package with adhesive at column 14, lines 35-37.

In regard to claim 12, Suzuki teaches the surface where the element is formed of the semiconductor element is fixed on the one side of the substrate semiconductor package via a tape-like bonding material at column 14, lines 35-37.

In regard to claim 13, Suzuki teaches the surface where the element is formed of a semiconductor element is fixed on the one side of the substrate semiconductor package via a tape-like bonding material at column 14, lines 35-39.

In regard to claim 14, Suzuki teaches the surface where the element is formed of a semiconductor element is fixed on the one side of the substrate of semiconductor package with adhesive at column 14, lines 35-37.

Art Unit: 2818

In regard to claim 15, Suzuki teaches the surface where the element is formed of a semiconductor element is fixed on the one side of the substrate of the semiconductor package with adhesive at column 14, lines 35-37.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. R. Berry whose telephone number is (703) 305-4544.



RRB

August 12, 2002



HOAI HO
PRIMARY EXAMINER